
NATIONAL CENTER FOR EDUCATION STATISTICS

Statistics in Brief

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Eighth to Tenth Grade Dropouts

Contact:

Marilyn McMillen
(202) 219-1754

The rate at which students drop out of school is well recognized as a national educational problem.¹ As the demand for highly skilled and educated workers increases, the nation needs to have fully prepared workers entering the labor force. Students without a high school education are likely to be ill-prepared for their roles in the American work force.

In order to fully understand the question of who is dropping out, data are needed for tracking movements in and out of school as students drop out, or stop out and re-enter. Ultimately, this tracking results in measures of the number of graduates, dropouts, and delayed completers--that is, dropouts who eventually complete a high school degree or alternative certificate. Longitudinal studies provide the data needed to track the dropout experiences of a single group or cohort of students over a specific period of time.

The National Center for Education Statistics (NCES) High School and Beyond (HS&B) longitudinal study of the sophomore class of 1980 provided the first national cohort dropout and completion data. Data from the HS&B third followup show that 17.3 percent of the 1980 sophomore cohort dropped out of school by the end of their senior year. By 1986, about 46 percent of the dropouts had returned to school and either earned a high school diploma or its equivalent.²

The question as to what happens, in terms of dropout experiences, as students make the transition into high school has remained unanswered. The HS&B study started with a sophomore cohort. And, analyses of trends over time in existing national cross-sectional dropout rates from the Current Population Survey (CPS) are restricted to the population age 15 and above.

In 1988 NCES started the National Education Longitudinal Study (NELS:88) of an eighth grade cohort. Data from that study provide a first opportunity to study young dropouts on a national scale, and the first

opportunity to study transitions into high school. NELS:88 also provides a basis for examining the contextual school and family factors associated with dropping out.

NELS:88 data from the 1988 base year interview and the 1990 first followup show that 6.8 percent of this cohort dropped out of school between the eighth and tenth grades. These students were classified as dropouts in NELS:88 during the spring of their sophomore year. The basic demographic characteristics for this cohort show significant differences in dropout rates by race/ethnicity, but not by sex. The cohort rates of 9.6 for Hispanic students and 10.2 for black students are significantly higher than the rates of 5.2 for white students and 4.0 for Asian students. In contrast, the cohort dropout rates of 7.2 for male students and 6.5 for female students are not significantly different (figure 1).

Geographic indicators show that with dropout rates of 8.9, students in the South are more likely to drop out than students in the Midwest (5.5 percent) and the Northeast (5.9 percent). When urbanicity is considered, the data show that students in central cities are more likely than students in suburbs to drop out between the eighth and tenth grades (8.9 percent in central cities versus 5.4 percent in suburbs) (figure 2).

Analysis of school sector dropout rates shows that students who attended public schools in the eighth grade are more likely to drop out of school by the tenth grade (7.6 percent) than students who attended Catholic school (1.3 percent), private nonreligious schools (0.5 percent), or other private religious schools (0.4 percent) in the eighth grade (figure 3).

As this cohort progresses through high school, NELS:88 will provide data needed to profile the movements of students in and out of school and alternative degree programs. The NELS:88 cohort will be followed up again in 1992 when most students in this cohort will be near the end

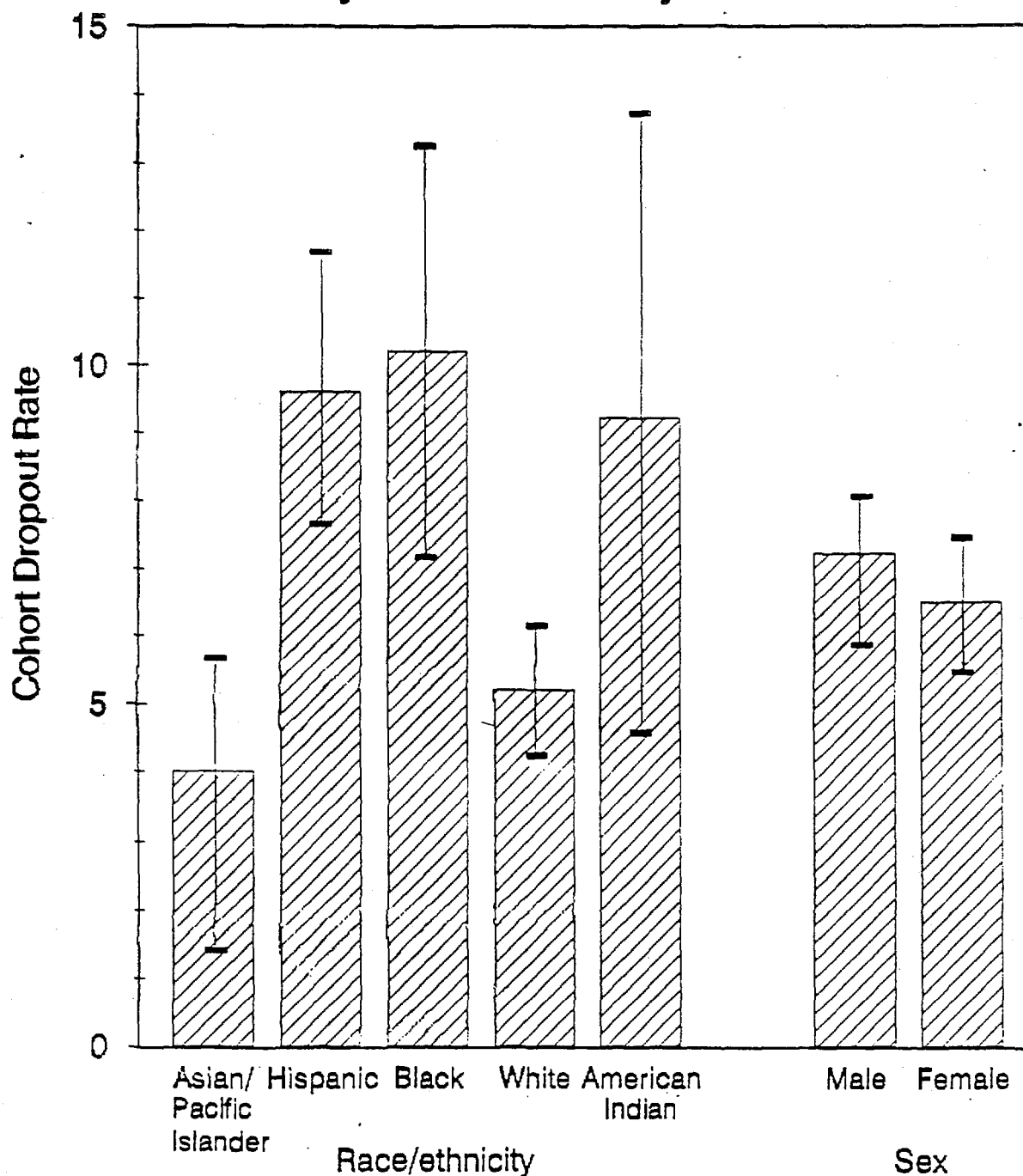
of their senior year of high school and in 1994 when most will have completed high school. The NELS:88 longitudinal data base, with achievement measures and extensive background and contextual data, will be used in analyses of the graduation, dropout, and completion data for this cohort of students.

Survey Methodology and Data Reliability

The NELS:88 baseline comprised a national probability sample of all regular public and private eighth grade schools in the 50 states and the District of Columbia in the 1987-88 school year. During the base year data collection, students, parents, teachers, and school administrators were selected to participate in the survey. The total eighth grade enrollment for the 1,052 NELS:88 sample schools was 202,996. During the listing procedures (before 24-26 students were selected per school) 5.35 percent of the students were excluded because they were identified by school staff as being incapable of completing the NELS:88 instruments owing to limitations in their language proficiency or to mental or physical disabilities. Ultimately, 93 percent or 24,599 of the sample students participated in the base-year survey in the spring of 1988.

The NELS:88 first followup survey was conducted in the spring of 1990. Students, dropouts, teachers, and school administrators participated in the followup, with a successful data collection effort for approximately 93 percent of the base-year student respondents. In addition, because the characteristics and education outcomes of the students excluded from the base year may differ from those of students who participated in the base-year data collection, a special study was initiated to identify the enrollment status of a representative sample of the base-year ineligible students. Data from this sample were then combined with first follow-up data for the computation of eighth to

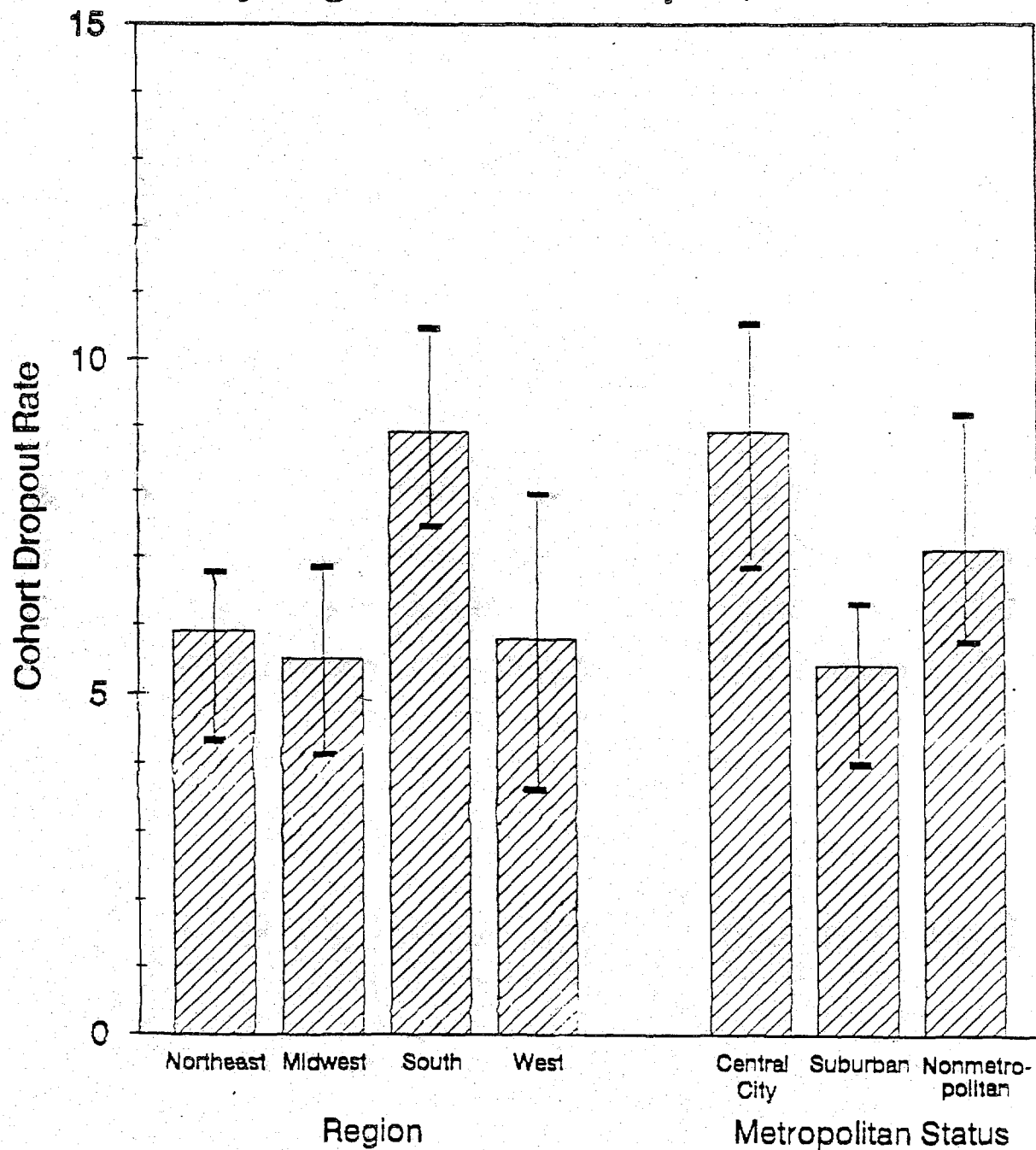
Figure 1
Eighth to tenth grade cohort dropout
rates by race/ethnicity and sex



NOTE: Vertical lines represent 95 percent confidence intervals around each rate.

SOURCE: U.S. Department of Education, OERI, NCES, NELS:88.

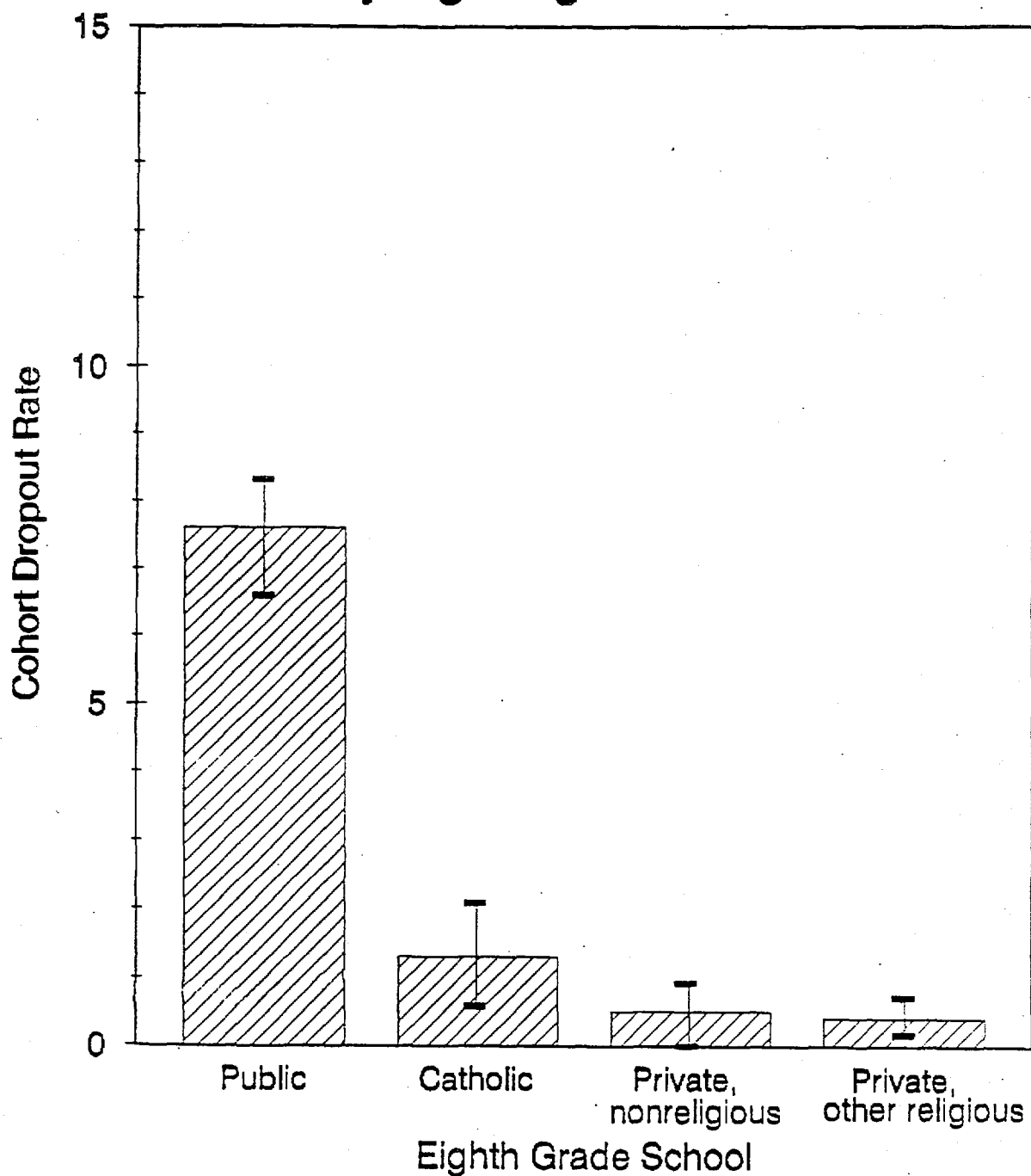
Figure 2
Eighth to tenth grade cohort dropout
rates by region and metropolitan status



NOTE: Vertical lines represent 95 percent confidence intervals around each rate.

SOURCE: U.S. Department of Education, OERI, NCES, NELS:88.

Figure 3
Eighth to tenth grade cohort dropout
rates by eighth grade school



NOTE: Vertical lines represent 95 percent confidence intervals around each rate.

SOURCE: U.S. Department of Education, OERI, NCES, NELS:88.

tenth grade cohort dropout rates. Thus, the cohort dropout rate in this brief reflects the full student population of eighth graders in school in the spring of 1988. Missing from the cohort rate for grades eight to ten is anyone who dropped out prior to the spring of their eighth grade year. As a result, the overall cohort rate reported here may be lower than it would have been if a younger cohort were used. This may be particularly important for Hispanics, given that CPS data show that Hispanic dropouts tend to have completed less school than other dropouts.

According to the definition used in NELS:88, a dropout is an individual, who according to the school (if the sample member could not be located) or according to the school and home, has not been in school for 4 consecutive weeks or more and is not absent due to accident or illness; or a student who has been in school less than 2 weeks after a period in which he or she was classified as a dropout.

For the cohort dropout data in this Brief, information on dropout status was obtained first from the school and then confirmed with the household for 96.4 percent of the dropouts. Thus only 3.6 percent of the dropouts were identified by only the school reported information. The 7 sample cases who were deceased and the 103 sample cases who had left the country were excluded from the computation of the eighth to tenth grade cohort dropout rate.

The data were weighted to reflect the sampling rates (probability of selection) and were adjusted for nonresponse. The complex sample design was taken into account when a Taylor series approximation procedure was used to compute the standard errors in this Brief. The standard error is a measure of the variability due to sampling when estimating a parameter. It indicates how much variance there is in the population of possible estimates of a parameter for a given sample size. If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a particular statistic would include the true population parameter being estimated for about 95 percent of the samples (i.e. 95 percent confidence intervals). The figures in this brief include confidence intervals. Comparisons noted in this Brief are significant at the 0.05 level and were determined using Bonferroni adjusted t-tests.

ENDNOTES

¹ P.Kaufman, M.McMillen, & S. Whitener, Dropout Rates in the United States: 1990, U.S. Department of Education, National Center for Education Statistics (September 1991).

² M.Frase, Dropout Rates in the United States, 1988, U.S. Department of Education, National Center for Education Statistics (September 1989).